

**Iglesias, M., J. Miquel, D. Oñate, N. Díaz, P. Tugores, F. Ramos and M. Millán, WD 2009. Acoustic assessment and distribution of the main pelagic fish species in the ICES Subdivision IXa South during the ECOCÁDIZ 0609 Spanish survey (June-July 2009).**

**Abstract:** The present working document summarizes the main results from the Spanish “standard” acoustic (pelagic ecosystem-) survey conducted by IEO between 27 June and 6 July 2009 in the Portuguese and Spanish shelf waters (20–200 m isobaths) off the Gulf of Cadiz on-board the RV “Cornide de Saavedra”. The survey season was coincident with the anchovy (*Engraulis encrasicolus*) peak spawning to achieve an acoustic estimate of its SSB in the study area as well. Abundance and biomass estimates are given for all the mid-sized and small pelagic fish species susceptible of being acoustically assessed according to their occurrence and abundance levels in the study area. The distribution of these species is also shown from the mapping of their backscattering energies. Anchovy was distributed all over the shelf of the study area with the densest concentrations being recorded, as usual, in the Spanish waters. The total biomass estimated for anchovy was 21.6 thousand tonnes (1137 million fish), the lowest estimate in our survey series. Sardine (*Sardina pilchardus*) occurred all over the inner shelf, in shallower waters than anchovy, and showing the highest densities in the easternmost coastal waters of the sampled area. The total biomass estimated for sardine was also the lowest in its series, with 37.0 thousand tonnes (649 million fish). Chub mackerel (*Scomber colias*) was present all over the study area, showing the densest concentrations in the westernmost coastal waters off Algarve, although was also relatively abundant in the Spanish waters. This species contributed with the highest level of total biomass among the assessed species, with 56.3 thousand tonnes (629 million fish). Acoustic estimates for horse-mackerel species (*Trachurus spp.*), and bogue (*Boops boops*) are also given in the WD. No acoustic estimates either for mackerel *S. scombrus* or round sardinella (*Sardinella aurita*) were computed because their incidental occurrence in the study area during the survey. Results from this survey - although comparable with the ones provided by IPIMAR from its spring survey PELAGO09 - should not be still considered as definitive until they be properly combined with the results obtained from a new complementary survey, ECOCÁDIZ-COSTA 0709, conducted almost synchronously to the conventional survey in shallower waters than 20 m depth off the central part of the study area.